

Amendments to the Specification

Please replace the paragraph beginning at page 3, line 2, which starts with "It is therefore", with the following amended paragraph:

It is therefore an object of the present invention to provide a flip chip that overcomes the disadvantages of the prior art, and in particular, to provide a flip chip that includes a transient voltage suppression device that has a low clamping voltage.

Please delete the paragraph beginning at page 3, line 5, which starts with "It is another".

Please delete the paragraph beginning at page 3, line 8, which starts with "It is still another".

Please replace the paragraph beginning at page 3, line 15, which starts with "Briefly described", with the following amended paragraph:

Briefly described, and in accordance with a preferred embodiment thereof, the present invention relates to a flip chip that includes a transient voltage suppression device. The transient voltage suppression device includes a semiconductor die that includes a substrate diffused with a material to give the substrate a first conductivity type. The substrate has a substrate surface. A buried layer is selectively formed in the substrate surface and is diffused with another material to give the buried layer a second conductivity type. An epitaxial layer is formed on the substrate surface and on the buried layer. The epitaxial layer has the second conductivity type. The epitaxial layer has an epitaxial surface distal from the substrate surface. A first diffused region is selectively formed on the epitaxial surface. The first diffused region has the second conductivity type. The first diffused region has a first surface distal from the substrate surface. A second diffused region is selectively formed on the first surface. The second diffused region has the first conductivity type. The first diffused region and the second diffused region combine to form a first semiconductor junction. A third diffused region is selectively formed on the epitaxial surface

remote from the first diffused region. The third diffused region has the first conductivity type. The epitaxial layer and the third diffused region combine to form a second semiconductor junction. A first aluminum region is disposed on the second surface and a second aluminum region is disposed on the third surface. Two solder bump pads are at the first aluminum region and two solder bump pads are at the second aluminum region. The two solder bump pads at the first aluminum region are electrically coupled to the second diffused region and the two solder bump pads at the second aluminum region are electrically coupled to the third diffused region. The first semiconductor junction operates in a reverse avalanche mode while the second semiconductor junction operates in a forward conducting mode during a transient over-voltage event, and a transient current is shunted through the buried layer during the transient over-voltage event.

Please delete the paragraph beginning at page 4, line 4, which starts with "Another aspect of the".

Please delete the paragraph beginning at page 4, line 22, which starts with "A further aspect of".

Please replace the paragraph beginning at page 14, line 18, which starts with "In summary", with the following amended paragraph:

The TVS device **101** and the flip chip **202** have the small dimensions of 0.02 inch width by 0.04 inch length by 0.02 inch height, and have a low clamping voltage of 8-30 volts and a low capacitance of 10 pF or less. The clamping voltage and the capacitance of the TVS device **101** and the flip chip **202** are improvements over prior art TVS devices and flip chips of similar physical dimensions. Known prior art TVS devices and flip chips of similar physical dimensions have a clamping voltage of 9-36 volts and a capacitance of 30 pF.